L. Helms

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RAW SEQUENCE LISTING DATE: 08/13/2001 PATENT APPLICATION: US/09/581,345 TIME: 10:05:03

Input Set : A:\Nih339-1.app

Output Set: N:\CRF3\08132001\I581345.raw

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ENTERED
 3 <110> APPLICANT: Pastan, Ira H.
         Chowdhury, Partha S.
 5
         The Government of the United States
 6
         as represented by The Secretary of the
         Department of Health and Human Services
 7
 9 <120> TITLE OF INVENTION: Antibodies, Including Fv Molecules, and
10
         Immunoconjugates Having High Binding Affinity for
         Mesothelin and Methods for Their Use
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13 <130> FILE REFERENCE: 015280-339100US
15 <140> CURRENT APPLICATION NUMBER: US 09/581,345
16 <141> CURRENT FILING DATE: 2000-09-27
18 <150> PRIOR APPLICATION NUMBER: US 60/067,175
19 <151> PRIOR FILING DATE: 1997-12-01
21 <150> PRIOR APPLICATION NUMBER: WO PCT/US98/25270
22 <151> PRIOR FILING DATE: 1998-11-25
24 <160> NUMBER OF SEQ ID NOS: 9
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31 <213> ORGANISM: Artificial Sequence
33 <220> FEATURE:
34 <223> OTHER INFORMATION: Description of Artificial Sequence:SS scFv
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39 agccatggaa agagccttga gtggattgga cttattactc cttacaatgg tgcttctagc 180
40 tacaaccaga agttcagggg caaggccaca ttaactgtag acaagtcatc cagcacagcc 240
41 tacatggacc tecteagtet gacatetgaa gactetgeag tetatttetg tgeaaggggg 300
42 ggttacgacg ggaggggttt tgactactgg ggccaaggga ccacggtcac cgtctcctca 360
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44 cagtetecag caateatgte tgcateteca ggggagaagg teaceatgae etgeagtgee 480
45 agctcaagtg taagttacat gcactggtac cagcagaagt caggcacctc ccccaaaaga 540
46 tggatttatg acacatccaa actggcttct ggagtcccag gtcgcttcag tggcagtggg 600
47 tetggaaact ettaetetet cacaateage agegtggagg etgaagatga tgeaacttat 660
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49 aaa
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54 <213> ORGANISM: Pseudomonas aeruginosa
56 <220> FEATURE:
57 <223> OTHER INFORMATION: Pseudomonas aeruginosa exotoxin A CDS
59 <400> SEQUENCE: 2
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61 tegteegegt eegeegeega ggaageette gaeetetgga aegaatgege caaageetge 120
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62 gtgctcgacc tcaaggacgg cgtgcgttcc agccgcatga gcgtcgaccc ggccatcgcc 180

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65 gaaggeggeg tegageegaa caageeggtg egetacaget acaegegeea ggegegege 360
66 agttggtcgc tgaactggct ggtaccgatc ggccacgaga agccctcgaa catcaaggtg 420
67 ttcatccacg aactgaacgc cggcaaccag ctcagccaca tgtcgccgat ctacaccatc 480
68 gagatgggcg acgagttgct ggcgaagctg gcgcgcgatg ccaccttctt cgtcagggcg 540
69 cacgagagea acgagatgea geogaegete geeateagee atgeeggggt cagegtggte 600
70 atgqcccaga cccaqccqcg ccqqqaaaaq cqctqqaqcq aatgggccaq cggcaaqgtg 660
71 ttgtqcctqc tcqacccqct qqacqqqqtc tacaactacc tcqcccaqca acqctqcaac 720
72 ctcgacgata cctgggaagg caagatctac cgggtgctcg ccggcaaccc ggcgaagcat 780
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76 gecetetace tggeggegeg getgtegtgg aaccaggteg accaggtgat cegeaacgee 1020
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78 gecegtetgg ceetgaceet ggeegeegee gagagegage gettegteeg geagggeace 1140
79 ggcaacgacg aggccggcgc ggccaacgcc gacgtggtga gcctgacctg cccggtcgcc 1200
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84 egegegea gecaggaeet egaegegate tggegeggtt tetatatege eggegateeg 1500
85 gegetggeet acggetacge ceaggaceag gaaceegacg cacgeggeeg gateegeaac 1560
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89 ctcggctggc cgctggccga gcgcaccgtg gtgattccct cggcgatccc caccgacccg 1800
90 cgcaacgtcg gcggcgacct cgacccgtcc agcatccccg acaaggaaca ggcgatcagc 1860
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98 <220> FEATURE:
99 <223> OTHER INFORMATION: Description of Artificial Sequence: New G2 NdeI
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          back primer
102 <400> SEQUENCE: 3
103 taagaaggag atatacatat gcaggtacaa ctgcagcagt ctggg
105 <210> SEQ ID NO: 4
106 <211> LENGTH: 42
107 <212> TYPE: DNA
108 <213> ORGANISM: Artificial Sequence
110 <220> FEATURE:
111 <223> OTHER INFORMATION: Description of Artificial Sequence: New G2 HindIII
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115 gccctcggga cctccggaag cttttatttc caactttgtc cc
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117 <210> SEQ ID NO: 5
118 <211> LENGTH: 241
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Input Set : A:\Nih339-1.app

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129 Ala Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Gly
                                     25
132 Tyr Thr Met Asn Trp Val Lys Gln Ser His Gly Lys Ser Leu Glu Trp
                                 40
135 Ile Gly Leu Ile Thr Pro Tyr Asn Gly Ala Ser Ser Tyr Asn Gln Lys
                             55
138 Phe Arg Gly Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Ser Thr Ala
                         70
141 Tyr Met Asp Leu Leu Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Phe
144 Cys Ala Arg Gly Gly Tyr Asp Gly Arg Gly Phe Asp Tyr Trp Gly Gln
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147 Gly Thr Thr Val Thr Val Ser Ser Gly Val Gly Gly Ser Gly Gly Gly
            115
                                120
150 Gly Ser Gly Gly Gly Ser Asp Ile Glu Leu Thr Gln Ser Pro Ala
                            135
153 Ile Met Ser Ala Ser Pro Gly Glu Lys Val Thr Met Thr Cys Ser Ala
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                                            155
156 Ser Ser Ser Val Ser Tyr Met His Trp Tyr Gln Gln Lys Ser Gly Thr
                    165
                                        170
159 Ser Pro Lys Arg Trp Ile Tyr Asp Thr Ser Lys Leu Ala Ser Gly Val
                180
                                    185
162 Pro Gly Arg Phe Ser Gly Ser Gly Ser Gly Asn Ser Tyr Ser Leu Thr
                                200
165 Ile Ser Ser Val Glu Ala Glu Asp Asp Ala Thr Tyr Tyr Cys Gln Gln
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168 Trp Ser Gly Tyr Pro Leu Thr Phe Gly Ala Gly Thr Lys Leu Glu Ile
169 225
                        230
                                            235
171 Lys
175 <210> SEQ ID NO: 6
176 <211> LENGTH: 15
177 <212> TYPE: PRT
178 <213> ORGANISM: Artificial Sequence
180 <220> FEATURE:
181 <223> OTHER INFORMATION: Description of Artificial Sequence:linker peptide
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189 <210> SEQ ID NO: 7
190 <211> LENGTH: 4
191 <212> TYPE: PRT
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Input Set : A:\Nih339-1.app

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192 <213> ORGANISM: Artificial Sequence 194 <220> FEATURE: 195 <223> OTHER INFORMATION: Description of Artificial Sequence:peptide linker 197 <400> SEQUENCE: 7 198 Gly Gly Ser 199 1 202 <210> SEQ ID NO: 8 203 <211> LENGTH: 4 204 <212> TYPE: PRT 205 <213> ORGANISM: Artificial Sequence 207 <220> FEATURE: 208 <223> OTHER INFORMATION: Description of Artificial Sequence:carboxyl terminus 211 <400> SEQUENCE: 8 212 Lys Asp Glu Leu 213 1 216 <210> SEQ ID NO: 9 217 <211> LENGTH: 4 218 <212> TYPE: PRT 219 <213> ORGANISM: Artificial Sequence 221 <220> FEATURE: 222 <223> OTHER INFORMATION: Description of Artificial Sequence:carboxyl terminus 225 <400> SEQUENCE: 9 226 Arg Glu Asp Leu 227 1

VERIFICATION SUMMARY DATE: 08/13/2001 PATENT APPLICATION: US/09/581,345 TIME: 10:05:04

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